2005 Annual Report to the Public Water Access Advisory Board
Programs and Activities of the
NH Department of Environmental Services

December 5, 2005

During 2005, the Department of Environmental Services (DES) engaged in numerous programs and activities associated with recreational opportunities and public access to the state's waters; these items are highlighted below. The DES continues to be extremely active in its efforts to expand and/or improve public access opportunities across New Hampshire.

Specific DES Projects Providing Public Access:

Repairs, reconstruction or significant maintenance was conducted at the following DES managed dam sites:

Jones Brook, Middleton – Conducted emergency stabilization.
Jones Pond, New Durham – Reconstructed the dam.
Lakeport, Paugus Bay, Laconia – Performed maintenance at the dam operator residence.
Baker River and Souhegan River Valley sites – Mowed and maintained all sites within these areas.
Gilson Pond, Jaffrey – Reconstructed the dam.
Webster Lake, Franklin – Reconstructed the dam.

Typically, the DES Dam Bureau Site Enhancement crew improves, develops and maintains public access at DES dam sites. Due to budget constraints, DES did not staff a Site Enhancement crew during the summer of 2005.

Cooperative Projects with Other Agencies/Organizations:

Public Boat Access Facility on Winnisquam Lake, Laconia – Throughout 2005, DES continued to work with the NH Fish & Game Department (F&G), the City of Laconia, and the Lake Winnisquam Association to develop an access site on the Winnipesaukee River, which will provide access to Winnisquam Lake.

Public Boat Access Facility on Baxter Lake, Rochester – Working cooperatively with F&G, DES construction crews began construction of a public boat access facility. An access road, a 20+ car/trailer parking lot, kiosk, and the boat launch have been roughed in; work will be completed in the spring of 2006.

DES Bureaus and Programs that Support Public Access:

Dam Bureau

Owns and Operates 113 Dams – DES provides boating recreational opportunities by regulating the water level of the controlled waterbodies. Many of these dam sites have public access facilities which require constant maintenance, repairs and enhancements. The Dam Bureau is preparing property management plans for each dam site. As part of the plans, the need and the opportunities to improve public access is

fully evaluated.

Monitored Existing Lease Agreements - DES and local communities work cooperatively to provide public access at several locations across the state, including: Bow Lake in Strafford, Lovell Lake in Wakefield, Goshen Lake in Goshen, Oliverian Brook Flood Control Impoundment in Benton, Deering Reservoir in Deering, Milton 3 Ponds in Milton, and the Waumbek and Rowe sites on the Salmon Falls River in Milton.

Flooding of October 2005 – The DES Dam Bureau operated state-owned dams night and day from the start of the flooding on October 9 through the flooding that occurred a week later to safely pass the flood flows to avoid overtopping the dams and to reduce in-lake and downstream flooding. In addition, Dam Bureau Dam engineers and technicians performed dam safety inspections of all privately owned High, Significant and Low Hazard Dams in the flood-affected areas, and provided guidance to private and municipal dam owners during the flooding to ensure that these dams could continue to safely impound the lakes behind them.

Wetlands Bureau

DES ensured that public access was provided whenever a marina was proposed for a lake, a river, or the seacoast.

The Wetlands Bureau has a liaison who works with the F&G Public Access Program to coordinate reviews and approvals of various jurisdictional programs within DES in an effort to facilitate construction of public access sites as proposed by NH F&G.

Watershed Management Bureau

Clean Vessel Act Program

DES continues to request funds from the US Fish and Wildlife Service for installation of new pumpout systems throughout the state and to operate the mobile pumpout boat service in coastal waters. DES hopes to purchase a new pumpout boat during the early part of 2006 to better service seacoast area boaters.

Coastal Waters – The Clean Vessel Act program has provided funds to the Hampton River Marina to install a new pumpout system. To date, only a portion of the system has been installed; a portable unit will service live-aboards during the winter months. The remainder of the system, a fixed unit, will be installed in the spring of 2006.

A No Discharge Area for New Hampshire's coastal waters was approved by EPA in September 2005. This means that all boat sewage discharges are now prohibited within three nautical miles of the shoreline. Boats that treated their wastes were previously allowed to discharge within the three mile boundary. DES proved to EPA that adequate pumpout facilities existed and there was a need to protect resources from pathogens and nutrients that can be found in sewage discharges.

Inland Waters – No new pumpout systems were funded within the state's inland waters during 2005. DES is pursuing a pumpout system for Lake Sunapee, which is currently serviced by a dump station. Dump stations accept only portable toilet wastes, while a pumpout system removes wastes from fixed toilets. The Clean Vessel Act program anticipates funding replacement systems in the near future.

Boat Inspection Program

The Boat Inspection Program conducted 90 first-time inspections and a total of 100 inspections on Lakes Winnipesaukee and Winnisquam. In the past, violations of sink and shower and/or MSD regulations were

the most common. The major source of violations continues to be boats brought in from other states, especially those coming from the ocean. Under pressure from local dealers, many manufacturers are modifying boats destined for New Hampshire to comply with the state's no-discharge law.

Public Beach Inspection Program
New Hampshire has received an EPA grant to improve the existing Coastal Beach Program. The grant has several goals including: 1) to identify and implement an improved beach advisory notification system; and 2) to better identify sources of E. coli and to initiate best management practices (BMPs) to reduce bacteria loading at public beaches. The NH Coastal Beach Program is considered one of the best in the country and this grant will further the state's efforts to protect public health.

DES inspected a total of 158 freshwater and 15 coastal public swimming beaches. Freshwater beaches were inspected monthly for a total of 559 inspections. Coastal beaches were inspected once per week for a total of 204 inspections. Twenty nine freshwater public beaches were issued a total of 37 advisories for exceeding the public beach water quality standards for E. coli. Five freshwater beaches were issued cyanobacteria advisories for the presence of a potentially toxic cyanobacteria scum. Fourteen beach advisories were issued at Ahern State Park, Laconia as a result of a pre-emptive advisory following > 0.25 inches of rainfall. One coastal beach was issued a beach advisory for exceeding public beach water quality standards for Enterococci.

Exotic Species Program
Milfoil Control Funds – DES provided milfoil grant funds to 21 organizations to chemically control growths of exotic aquatic plants in 2005. Also, one grant was awarded to the Lake Massasecum Improvement Association to harvest variable milfoil from the northern end of the lake.

Milfoil and Other Exotic Plants Prevention Fund – DES issued grants to the New Hampshire Lakes Association for a Lake Host Program, to the Connecticut River Conservation District Coalition for education activities along the Connecticut River Corridor, as well as monitoring activities, and to the Department of Safety for updating and adding information pertaining to exotic plants in the New Hampshire Boater's Guide.

Public Education and Outreach – DES distributed numerous milfoil signs and educational pamphlets throughout the state. There are more than 400 volunteer Weed Watchers from across the state working in cooperation with DES on more than 200 waterbodies.

Management of Exotic Plants – DES worked in 24 waterbodies using techniques such as hand-pulling, placement of bottom barriers, harvesting, and/or the application of herbicides to control exotic plants.

New Infestations of Variable milfoil – None in 2005, however, there was one new infestation of fanwort documented during the summer of 2005.

Clean Lakes Program
Baboosic Lake, Amherst – DES is continuing to develop the final Lake and Watershed Diagnostic Study.
Partridge Lake, Littleton – A draft report was submitted to the lake association for review and comment. Once comments are returned to DES, the final draft will be prepared, and a presentation will be made to the town.
Rust Pond, Wolfeboro – The draft report is nearly complete.
Perkins Pond, Sunapee – Field studies on Perkins Pond commenced on June 1, 2004, and continued through May 31, 2005. Data entry and analysis are taking place at this time.

Lake Trophic Survey Program
Limnological surveys were conducted at 43 stations on 41 different lakes in 2005. Many of these lakes have public boat access.

Mercury in Fish Program
Changes have occurred to the cooperative program to collect fish, analyze for mercury and issue fish consumption advisories. The NH Public Health Lab is no longer able to do the fish-mercury analyses and the human health risk assessment program was transferred from Health and Human Services to Environmental Services. The 172 fish collected from lakes and ponds in 2004 were kept frozen for approximately one year until arrangements were made with EPA for their analysis. The 2004 fish-mercury data is now in our database. DES is currently in the process of developing the capability to conduct fish tissue analyses for mercury. The instrumentation is on order and is expected to be operational by early next year. Fish were collected in 2005. Most of these fish remain frozen as whole fish although 41 have been processed into fillet samples. Most of the lakes and ponds from which the fish were collected have public access facilities.

Biomonitoring Program
DES collected macro-invertebrate samples, evaluated fish populations, and conducted habitat assessments at 20 river stations. This data is used to assess the biological health of numerous streams, which support fishing access.

Surface Water Quality Assessments
Water Quality Monitoring of Rivers – While DES has conducted these assessments for several years, there are 9,304 river and stream miles that need to be tested. For the "swimming" designated use, 86 percent of the state's river miles have not yet been assessed. Of the 14 percent of the river miles that have been assessed – 9 percent support swimming while 5 percent did not. For the "aquatic life support" designated use, 87 percent of the state's river miles have not yet been assessed. Of the 13 percent of the river miles that have been assessed – 1.7 percent support aquatic life while 11.3 percent did not.

Water Quality Monitoring of Lakes – While DES has conducted these assessments for several years, there are approximately 164,600 surface acres of lakes and ponds that need to be tested. For the "swimming" designated use, 44 percent of the state's surface water acres have not yet been assessed. Of the 56 percent of the surface water acres that have been assessed – 55 percent support swimming while 1 percent did not. For the "aquatic life support" designated use 48 percent of the states surface waters have not been assessed. Of the 52 percent that have been assessed – 4.7 percent fully support aquatic life while 47.4 percent did not.

Volunteer Lake Assessment Program (VLAP)
2005 was a banner year for the Volunteer Lake Assessment Program. At the New Hampshire Lakes Association Lakes Congress on June 18, 2005, Governor John Lynch signed HB 487 into law, which established VLAP within DES. While this program has been in operation since 1985, this law formally established the program, the coordinator position, and also allows the program to receive donations, gifts, and grants. In addition, VLAP, which celebrated its 20th anniversary in 2005, set a new volunteer participation record again this season. A total of 161 lakes were sampled by approximately 450 volunteers throughout the state. In addition, it is estimated that approximately 13,000 total sample results were generated by the VLAP program in 2005. By sampling a lake several times each year over a period of years, long-term water quality trends can be discerned. The sampling efforts of the volunteer monitors supplement the sampling and assessment efforts of DES, saving the State personnel and travel costs. Only through the help of volunteer monitors can such a volume of sampling be accomplished throughout the state.

Volunteer River Assessment Program (VRAP)

During 2005 seven new volunteer river monitoring groups joined the VRAP program bringing the total number of groups to 26. Over 165 water quality stations were monitoring by VRAP volunteers providing over 10,000 data points. For many of the VRAP rivers and tributaries, the volunteers are providing DES with its only source of data available for use in the assessment process. As with the VLAP program, the VRAP volunteers provide the agency with high quality data while saving the state significant expense.